

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-21. (canceled)

22. (currently amended) Biocompatible coating, comprising: ~~characterised in that the coating comprises,~~

a binding layer in contact with ~~[[the]]~~ a substrate and comprising mainly hydrated calcium aluminate particles of less than 2 μm [[,]];

a bulk layer comprising mainly hydrated calcium aluminate having a grain size between 3 and 30 μm [[,]]; and

an outer layer comprising a bioactive or biocompatible material, ~~preferably calcium phosphate, apatite, calcium carbonate or calcium fluoride.~~

23. (currently amended) Biocompatible coating according to claim 22, wherein ~~characterised in that~~ the coating is capable of carrying drugs.

24. (currently amended) Surface coated device, comprising a substrate and a surface coating covering at least a section of the substrate surface, wherein the surface coating is a biocompatible surface coating comprising:

a binding layer in contact with the substrate and comprising mainly hydrated calcium aluminate particles of less than 2 μ m;

a bulk layer comprising mainly hydrated calcium aluminate having a grain size between 3 and 30 μ m; and

an outer layer comprising a bioactive or biocompatible material ~~characterised in that the surface coating is a biocompatible surface coating made by using the method comprising the steps of:~~

~~-preparing one powder mixture, or several powder mixtures having different chemical composition, wherein at least one of said powder mixtures comprise a non-hydrated hydraulic ceramic powder binder phase,~~

~~-pre-treating the surface of a substrate to increase the adhesion between the substrate and the ceramic coating,~~

~~-applying one or more layers of said non-hydrated powder mixtures on top of each other on the substrate, and~~

~~-hydrating the powder layer/layers utilizing a curing agent comprising ions of carbonates, phosphates or fluorides.~~

25. (currently amended) Surface coated device according to claim 24, wherein ~~characterised in that~~ the substrate is Ti or alloys thereof, stainless steel, Co-Cr alloys, ~~another~~ a biocompatible metal, polymeric or ceramic material, or any combination thereof.

26. (currently amended) Surface coated device according to claim 24, that ~~characterised in that it is one of an a medical device, medical device for implantation,~~ artificial orthopedic device, spinal implant, joint implant, ~~attachment element,~~ bone nail, bone screw, [[or]] a bone reinforcement plate and any other implantable element.

27. (canceled)

28. (new) The biocompatible coating of claim 22, wherein said outer layer comprises one of calcium phosphate, apatite, calcium carbonate and calcium fluoride.

29. (new) The surface coated device of claim 24, wherein said outer layer comprises one of calcium phosphate, apatite, calcium carbonate and calcium fluoride.